

Replacement PID Controller For Camp Chef Gen2

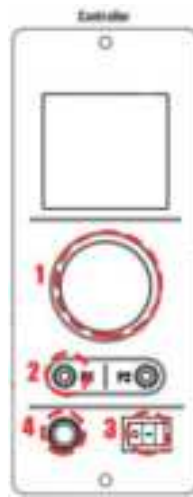
User Manual

The Controller is the replacement control board for Camp Chef Gen2 Non-WiFi Pellet Grill SG 24/30, SGX, DLX, XT, Pursuit 20 models, (NOT XXL Vertical Smoker)

This Grill Controller now features two types of PID algorithms added to the original controller, enhancing temperature control precision. This upgrade helps in achieving a more perfect grilling and smoking experience.

Illustration:

- 1: Dial to choose, press the dial to confirm the choose.
- 2: Meat probe jacks
- 3: Power Switch
- 4: Fuse Socket: Where replace the burned out fuse.



Controller Instructions

Power Switch

Used to turn the main power onto the pellet grill. “0” is OFF, “|” is ON. When the controller is first powered on, the Selector Knob must be pressed to enter the MENU.

Controller Functions

Rotate the dial to scroll through menus, adjust temperature, or smoke settings. Press the dial to select.

SET MODEL

This setting is used to choose an appropriate PID version for your grill by the size of it.

When you turn on the unit, the default version code “MODEL: 600” is displayed on the screen.

1. Dial to “MENU” then Press the dialing knob to enter it.
2. Dial to “SET MODEL” then press the knob to enter setting.
3. Dial and then press the knob to choose a code, “MODEL: 300” is for small grill (SG24 & Pursuit 20), “MODEL: 600” is for the other big grill models.

About the "PID"

The industry standard PID controller regulates smoke and temperature and adjusts in real time to changes of the grill’ s environment, to give you more consistent cooks.

- **NOTE:** As the grill reaches the set temperature, the PID regulates it by cycling the auger and fan on and off, creating a “puffing” sound. This is normal.

SHUTDOWN

This setting must be used after each use. Select SHUTDOWN from the main menu. The fan will remain on for up to 20 minutes. This setting will burn up any extra pellets in the burner and cool down the grill. Do not turn the main power switch off when the grill is hot.

FEED - Select FEED from the main menu. This setting is used to feed pellets to the burner. It will be used the first time you use the grill to fill the auger tube and any time you may inadvertently run the hopper out of pellets. See instructions on filling the auger tube.

SET TEMP LOW SMOKE – Select SET TEMP from the main menu. Rotate dial to LOW SMOKE and press to confirm. This setting is used for smoking foods at an average temperature of 160F. This setting will produce large amounts of smoke.

SET TEMP HIGH SMOKE – Select SET TEMP from the main menu. Rotate dial to HIGH SMOKE and press to confirm. This setting is used for smoking foods at an average temperature of 220F. This setting will produce large amounts of smoke.

SET TEMP 160F TO 450F – Select SET TEMP from the main menu. Rotate dial to the desired temperature and press to confirm.

SET TEMP HIGH – Select SET TEMP from the main menu. Rotate dial to HIGH and press to confirm. This setting can be used to achieve temperatures up to 500F depending on ambient temperatures.

SET SMOKE – The SET SMOKE setting is available for temperatures from 160F – 350F. Select SET SMOKE from the main menu. Rotate dial to the desired SMOKE SETTING and press to confirm. The SMOKE SETTING can be adjusted from 1–10. A smoke setting of 1 will produce less smoke and maintain a more even temperature. As the smoke setting is increased more smoke will be produced. Note that as the smoke setting is increased temperature fluctuations will increase.

UNITS: This setting is used to change the temperature display units. Rotate the selector knob to change from degrees F to degrees C. Press the selector knob to confirm the selection.

“START” : The digital readout will display “START” once the Set Temperature has been selected. The startup cycle is typically less than 8 minutes. A countdown timer will be displayed, showing the time remaining in Start Mode. When the Start cycle is complete the digital readout will display the temperature inside the grill and the set temperature and the grill will be in Run Mode. If, during the start cycle, the selector knob is rotated BYPASS or CANCEL will be displayed. If BYPASS is selected, the controller will stop the Start cycle and enter Run mode (see Bypass Mode section of this manual). If CANCEL is selected the controller will stop the Start cycle and enter Shutdown Mode. (see Shutdown section of this manual).

“SDOWN”: The digital readout will display “SDOWN” and a countdown timer. After approximately 20 minutes the digital readout and fan will turn off.

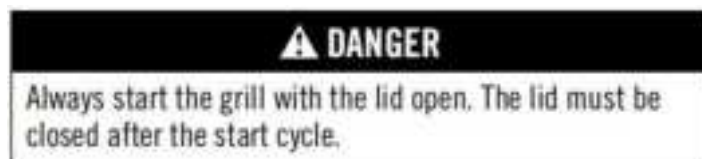
“RTD ERROR” : The digital readout will display “RTD ERROR” if there is a problem with the temperature sensor inside of the grill.

“– – –” (Probe Temperature): The digital readout will display “– – –” if either of the external probes are not plugged in or there is a problem with the probe.

“FLAME OUT” : The digital readout will display “FLAME OUT” if the fire inside the grill has been extinguished.

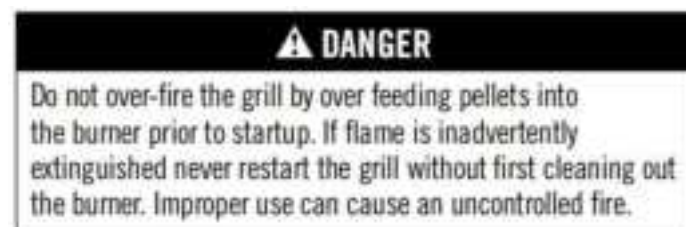
“OVER TEMP” : The digital readout will display “OVER TEMP” if the fire inside the grill has exceeded safe operating

temperature.



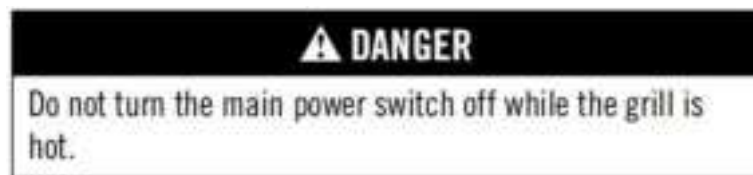
Cooking

Once the auger tube has been properly filled you can begin cooking by selecting SET TEMP from the main menu and setting the desired temperature (press selector knob). Upon confirming the set temperature the grill will go into Startup Mode. The controller will display START during the startup cycle and show a countdown timer. Typical start times are around 6 minutes. Once Start Mode is complete the controller will display the grill temperature and set temperature.



Shutdown

This setting must be used after each use. Select SHUTDOWN from the main menu. The fan will remain on for up to 20 minutes. This setting will burn up any extra pellets in the burner and cool down the grill. Do not turn the main power switch off when the grill is hot. After Shutdown Mode is complete the power switch should be switched to the OFF position. Before the grill can be used again, the power switch must be turned off and back on.



Bypass Mode

The bypass may be used if there is a power failure, or the grill is accidentally turned off, or anytime you need to restart the grill and it is still hot. The bypass mode should only be used if the grill has been off less than 3-4 minutes. This method is used to bypass the normal startup mode and get the grill cooking again quickly. The burner must still be hot enough to ignite new pellets or this method will not work. In order to initiate the bypass mode you must first select the cook setting you want. At this point the digital readout will display "START". BYPASS can be selected by turning the selector knob during startup mode and pressing the knob to confirm the selection. If the grill fails

Wiring:

